



App. No. 09/682,062

In the Claims:

1-12 (cancelled)

13. (new) A method for collision avoidance in Ethernet networks, the method comprising the following steps: Having a network with a plurality of control devices; Having all control devices management functions executed by a computer means; Sending a broadcast message to all of the control devices; Having said control devices response to said broadcast message on an unique time delay, having said network use an Ethernet standard, Using the fourth byte of the control device's MAC address as a counter; and Using said counter to determine the delay that said control device will send said response; Reducing the counter until counter reaches zero then having the control device send the response; Having said broadcast message contain an adjustment parameter to set required number of bytes used by said counter; Using said counter to determine the delay that said control device will send said response;

14. (new) A method as in Claim 13 in which said computer means is an 8-bit processor.

15. (new) A method as in Claim 13 further comprising having an Ethernet hub.

16. (new) A method as in Claim 13 including the following steps: Using the fourth, fifth and sixth bytes of the control device's MAC address as a decreasing counter; and Reducing the counter until counter reaches zero then having the control device send the response.

17. (new) A method as in Claim 13 including having each count last between 600 microseconds and 1 millisecond

18. (new) A method as in Claim 13 including avoiding collisions of response messages by including unique, deterministic delays generated in each control device.